



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,308	02/02/2006	Shinobu Kamimura	F-8844	6643
28107 7590 05/06/2009 JORDAN AND HAMBURG LLP 122 EAST 42ND STREET SUITE 4000 NEW YORK, NY 10168				
EXAMINER				
COOLEY, CHARLES E				
ART UNIT		PAPER NUMBER		
1797				
MAIL DATE		DELIVERY MODE		
05/06/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/552,308

Applicant(s)

KAMIMURA ET AL.

Examiner

Charles E. Cooley

Art Unit

1797

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 February 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/5508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

FINAL OFFICE ACTION

Priority

1. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). All of the CERTIFIED copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

Drawings

2. The replacement sheets of drawings filed 9 FEB 2009 are approved.

Claim Rejections - 35 USC § 102

3. The terms used in this respect are given their broadest reasonable interpretation in their ordinary usage in context as they would be understood by one of ordinary skill in the art, in light of the written description in the specification, including the drawings, without reading into the claim any disclosed limitation or particular embodiment. See, e.g., *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004); *In re Hyatt*, 211 F.3d 1367, 1372 (Fed. Cir. 2000); *In re Morris*, 127 F.3d 1048, 1054-55 (Fed. Cir. 1997); *In re Zletz*, 893 F.2d 319, 321-22 (Fed. Cir. 1989).

The Examiner interprets claims as broadly as reasonable in view of the specification, but does not read limitations from the specification into a claim. *Elekta Instr. S.A.v.O.U.R. Sci. Int'l, Inc.*, 214 F.3d 1302, 1307 (Fed. Cir. 2000). "A claim is anticipated only if each and every element as set forth in the claim is found, either

expressly or inherently described, in a single prior art reference." *Verdegaal Bros. Inc. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987).

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Lubitzsch et al. (US 4,219,038).

The patent to Lubitzsch et al. discloses a fluid mixer in Figure 1 for pressure feeding by fluids flowing through at least two supply lines 1, 2 to a mixing line 12 at an arbitrary ratio; each supply line 1, 2 comprising a diaphragm 7, 8 for adjusting the flow rate of the fluids provided on the upstream side from a point where said at least two supply lines are merged to the mixing line; pressure reducing valves 5, 6 further upstream side of said diaphragm 7, 8 and in series therewith; and a back pressure valve 13 in said mixing line 12; wherein a fixed orifice or a regulating valve is used for the diaphragms 7, 8 (col. 4, lines 40-41); wherein the pressure reducing valves 5, 6 and the back pressure valve 13 are automatic valves controlled via control line 14.

The element 13 is deemed equivalent to the recited back pressure valve in that the element 13 keeps the pressure in the supply lines 1, 2 downstream of valves 7, 8 equal and constant (therefore acting to absorb any pressure fluctuations) and also keeps the pressure on the upstream side constant (see at least col. 2, l. 54-65; col. 3, l. 10-12 and l. 33-66; col. 4, l. 4-10 and l. 40-60; col. 5, l. 1-13; and see claim 1 relating to

the constant admission pressure regulator means 13). With the addition of a control line 14 (seen as a dashed line in Fig. 1 between 6 and 13), the element 13 may be opened or closed and thus acts as a valve (see col. 3, l. 37-43). Accordingly, the element 13 located in the mixing line 12 can be considered equivalent to the recited "back pressure valve" recited in claim 1.

Claim Rejections - 35 USC § 103

6. To determine whether subject matter would have been obvious, "the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented."

Graham v. John Deere Co. of Kansas City, 383 U.S. 1, 17-18 (1966).

The Supreme Court has noted:

Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.

KSR Int'l Co. v. Teleflex Inc., 127 S.Ct. 1727, 1740-41 (2007). "Under the correct analysis, any need or problem known in the field of endeavor at the time of invention

and addressed by the patent can provide a reason for combining the elements in the manner claimed." (Id. at 1742).

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 2, 3, and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Lubitzsch et al. (US 4,219,038) in view of Bartlett, Jr. (US 6,280,692 B1).

The patent to Lubitzsch et al. discloses the recited subject matter as noted above including a back pressure valve 13 on the mixing line 12 but does not disclose the flow meter in the mixing line. The patent to Bartlett, Jr. discloses a fluid mixer system for pressure feeding fluids flowing through at least two supply lines 4, 12 to a mixing line 11, 18 having a mixer 11 at the merging point of the supply lines. A back pressure

valve 20 and a flow meter 19 are arranged in series in the mixing line downstream of the merging point. It would have been obvious and mere common sense to one having ordinary skill in the art, at the time applicant's invention was made, to have provided the fluid mixer system of Lubitzsch et al. with a flow meter in the mixing line in series with the existing back pressure valve as taught by Bartlett, Jr. for the purpose of enabling monitoring of the entire system (col. 8, lines 35-46). Note Bartlett, Jr. teaches that the flow meter 19 can be either upstream or downstream of the back pressure valve 20 (col. 8, lines 37-55).

Response to Amendment

10. Applicant's arguments filed 9 FEB 2009 have been fully considered but they are not deemed to be persuasive.

Applicant is reminded that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The factual determination of anticipation requires the disclosure in a single reference of every element of the claimed invention, either explicitly or inherently. See *In re Schreiber*, 128 F.3d 1473, 1477 (Fed. Cir. 1997). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an

ipsissimis verbis test, i.e., identity of terminology is not required. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

Turning to the rejection of the claims under 35 U.S.C. § 102(b), it is noted that the terminology in a pending application's claims is to be given its broadest reasonable interpretation (*In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989)) and limitations from a pending application's specification will not be read into the claims (*Sjolund v. Musland*, 847 F.2d 1573, 1581-82, 6 USPQ2d 2020, 2027 (Fed. Cir. 1988)). Anticipation under 35 U.S.C. § 102(b) is established only when a single prior art reference discloses, either expressly or under the principles of inherency, each and every element of a claimed invention. *See Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1570, 7 USPQ2d 1057, 1064 (Fed. Cir.), cert. denied, 488 U.S. 892 (1988); *RCA Corp. v. Applied Digital Data Sys., Inc.*, 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984). Moreover, anticipation by a prior art reference does not require either the inventive concept of the claimed subject matter or the recognition of properties that are inherently possessed by the prior art reference. *Verdegaal Brothers Inc. v. Union Oil co. of California*, 814 F.2d 628, 633, 2 USPQ2d 1051, 1054 (Fed. Cir. 1987), cert. denied, 484 U.S. 827 (1987). A prior art reference anticipates the subject matter of a claim when that reference discloses each and every element set forth in the claim (*In re Paulsen*, 30 F.3d 1475, 1478-79, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994) and *In re Spada*, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990)); however, the law of anticipation does not require that the reference teach what Applicant is claiming, but only that the claims "read on" something disclosed in the

reference. *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984) (and overruled in part on another issue), *SRI Intel v. Matsushita Elec. Corp. Of Am.*, 775 F.2d 1107, 1118, 227 USPQ 577, 583 (Fed. Cir. 1985). Also, a reference anticipates a claim if it discloses the claimed invention such that a skilled artisan could take its teachings in combination with his own knowledge of the particular art and be in possession of the invention. See *In re Graves*, 69 F.3d 1147, 1152, 36 USPQ2d 1697, 1701 (Fed. Cir. 1995), cert. denied, 116 S.Ct. 1362 (1996), quoting from *In re LeGrice*, 301 F.2d 929, 936, 133 USPQ 365, 372 (CCPA 1962).

With respect to the applied prior art under 35 U.S.C. § 102(b), the examiner has explicitly demonstrated how the reference discloses each and every element set forth in the claims and how the pending claims read on the disclosure of the reference, hence the rejection is considered proper.

Applicant's primary argument is that Lubitzsch et al. (US 4,219,038) does not disclose the back pressure valve in the mixing line. However, the term "valve" is indeed a broad term in the fluid handling art and is considered of a scope to encompass many fluid control devices. Other than a box labeled as "9" in the instant application, no other structure is disclosed or recited relating to this valve. Since element 13 in Lubitzsch et al. performs the functions attributed to the disclosed back pressure valve 9 (e.g., see p. 9, l. 28 – p. 10, l. 2 of the instant specification) and may indeed act or be controlled as a valve as noted above, the examiner concludes element 14 is equivalent to the broadly claimed back pressure valve.

Applicant also asserts that the valve of Lubitzsch et al. is not a back pressure valve, "as that term would be understood by one skilled in the art in light of Applicant's specification." Applicant's position on this point is considered to be speculative attorney's argument unsupported by objective technical evidence on the issue. Arguments of counsel cannot take the place of evidence in the record. *In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965); *In re Pearson*, 494 F.2d 1399, 1405, 181 USPQ 641, 646 (CCPA 1974).

With regard to the flow meter, the patent to Bartlett, Jr. discloses an analogous fluid mixer system for pressure feeding fluids flowing through at least two supply lines 4, 12 to a mixing line 11, 18 having a mixer 11 at the merging point of the supply lines wherein a back pressure valve 20 and a flow meter 19 are arranged in series in the mixing line downstream of the merging point. Thus, to provide the fluid mixer system of Lubitzsch et al. with a flow meter in the mixing line in series with the existing back pressure valve as taught by Bartlett, Jr. for the purpose of enabling monitoring of the entire system would have been prima facie obvious. Applicant's remarks refer to changing flow rate and adjustment of fluid mixing ratio, yet this language does not appear in the claims and recites no structure whatsoever that may define over the prior art. Such arguments are of no patentable consequence because it is well settled that features not claimed may not be relied upon in support of patentability. *In re Self*, 671 F.2d 1344, 213 USPQ 1 (CCPA 1982). Although a claim should be interpreted in light of the specification disclosure, it is generally considered improper to read limitations contained in the specification into the claims. See *In re Prater*, 415 F.2d 1393, 162

USPQ 541 (CCPA 1969) and *In re Winkhaus*, 527 F.2d 637, 188 USPQ 129 (CCPA 1975), which discuss the premise that one cannot rely on the specification to impart limitations to the claim that are not recited in the claim. Accordingly, the examiner believes the addition of a notoriously well known flow meter in such fluid mixing systems for monitoring the flow of the materials being processed is well within the realm of obviousness.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure by disclosing fluids fed through supply lines and flowing through a common mixing line.

Note the patent to **Krueger (US 4,171,191)** teaches a fluid mixer system for pressure feeding fluids flowing through at least two supply lines 48, 50 to a mixing line 52 wherein a back pressure valve 62 is arranged in the mixing line 52 to control the pressure in the supply lines and the outlet line – see Figure 1

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED

STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION. ANY RESPONSE FILED AFTER THE MAILING DATE OF THIS FINAL REJECTION WILL BE SUBJECT TO THE PROVISIONS OF MPEP 714.12 AND 714.13.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Cooley in Art Unit 1797 whose telephone number is (571) 272-1139. The examiner can normally be reached on Mon-Fri.. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Charles E. Cooley/

Charles E. Cooley
Primary Examiner
Art Unit 1797

6 May 2009

